PART 3
THE ISSUES
INTRODUCTION

This section includes discussion about three significant topics: image, path, display and activities.

Each of the topics represents an umbrella for a natural cluster of issues and needs in the museum environment.

The discussion of issues is the proper starting point for the programming and design process, because the issues explain and provide the rationale for the design solutions.

In addition to the description of the basic problems, each discussion refers to the relevant design principles. The organization of the book allows the reader to move from issues to design principles, and vice versa.
The image the museum portrays to the world is a composite of the tangible, visible, and the symbolic as interpreted by people who visit, pass by and hear about it. Although the goals of a museum are a combination of activities and display -- the program, the collection and exhibits, the overall museum experience is supported and represented by the image of a designed environment.

A clear understanding of the issues related to the internal and external image of the museum is necessary to translate its goals and program into a building form. The design and planning of the building and its environs can determine the dominant image.

Several important issues are involved in image-related decisions -- the museum's philosophy and attitude about the mood and nature of the "museum experience"; a need to attract usage; the museum's responsibility and accountability to the near and larger community; and the always present constraints of limited resources and budget.

Internal Image: The goals of the new museums and children's museums are to communicate and educate in a setting that is delightful, supportive and memorable. Environmental research in child and adult behavior has shown that all of us are drawn toward the complex and delight in the ambiguous -- to a point, for the brain seeks stimulation (Abbey, 1968). Providing enough complexity without overcrowding and overwhelming, and enough freedom for uninhibited play without trivializing the message are concerns for the broader issue of validity in the public eye (Parr, 1983; Parr, 1978).

Traditionally, museums focused on collecting, storing and displaying objects. Their ambience reflected this priority. Since the focus of the new museum is on education and communication through the use of objects, the nature and mood of the environment has changed. What was once a seriously organized environment for the protection of a collection has evolved into a delightful, memorable
spatial experience and a supportive learning environment. Yet, the old museums did a lot of things right. They were romantic, with mysterious hallways and ways to get lost without really getting lost or scared. For many children, it was the first time they were alone. They could discover their own thoughts and new ideas in their own time.

The old romantic museum did not mimic life. It provided glimpses of things not known or seen. It opened up new worlds. The dusty and dark, out-of-the-way galleries aided the imagination. It had smells.

External Image: Museums exist primarily to serve the public. This consists of providing programs and information for public use and preserving cultural artifacts and elements of the natural world. The particular mix or educational programming and preservation depends upon the focus of the individual museum; however, the internal and external evaluation of a museum's effectiveness in meeting its specific goals translates into a concern for the numbers -- "the headcount," volunteers, funding.

Museums need to attract and maintain a large constituency. No matter how small, well-funded, elite, its popularity is an index of success and a key to generate funding from the users directly as well as indirectly through government grants and private endowments (Hudson, 1975; Searing, 1982).

Parr is a staunch supporter of "enriching the urban milieu" and museum programs for more than the serious scholar; yet he warns against losing the public's esteem and support in the long run by focusing on "the numbers at the doors" and public relations at the expense of "the authoritative evaluation of truths, probabilities and significance" (Parr, 1978). In seeking a balance, the choice of site and careful design of the museum building and ground can set a mood, express intent and commitment to the public and to the pursuit of knowledge.

Setting the Mood from Afar: Although attracting visitors and receiving community and private support depends ultimately upon the quality and nature of the museum program, having a legitimate, appropriate image increases its visibility, attractiveness, and "presence" in the community and beyond.
Economic Constraints: Even if money were no object, the precedents established by The Exploratorium, The Boston Children's Museum and other museums that have their beginnings in the retrofitted, recycled, adaptive reuse buildings echo the underlying philosophies of environmental and community relevance and awareness. Constraints can be opportunities; translating the serious intent yet playful atmosphere of the adaptive-reuse beginning home into a new building reverses the usual design experience. Incongruities and limited square footage are easier to manage in the old.

Positive Self-Image: Attracting volunteers is as important as attracting funding. In the more interactive museums, docents are the backbone of the program. Indirectly, an appealing, attractive, and unique physical image attracts volunteers and influences the morale of the staff.

THE RIGHT LOCATION suggests a variety of solutions for high visibility, accessibility, and a compatible context -- even if the actual context is seemingly incongruent.

A LANDMARK deals with high visibility and symbolic prominence. Its approach offers alternatives to relying on the right location or a special building.

Ruder (1984) argues that exposing the inner workings of the museum to the public establishes a more intimate relationship between visitors and the body of the museum. The rate of volunteers and contributions from the public at large increases with the amount of intimacy.

The Exploratorium in San Francisco is based upon the fundamental belief that science and technology should be demystified through displays and activities that are simple and honest. In addition to the interactive displays made of basic and rough materials, the making of them happens on the public's floor. This reinforces the message that the visitor can do it too.

VISIBLE BACKSTAGE explores the ramifications of placing the curatorial staff on stage as well as the more passive forms of exposing the inner workings to the public.

Setting the Mood Near at Hand: All museums have the need to advertise, announce and invite. The image after hours, views for the uncommitted passersby, special hints for special groups are passive yet effective forms of communication.
Often, children's museums are tenants in buildings designed for other purposes. Many others occupy buildings that are neutral boxes. All need to project a particular image, set a mood, and convey their own unique spirit. If the museum does not appear from the outside as a place for children, the uncommitted passersby will not venture in when dragging children in tow.

A PREVIEW addresses anticipation, the role of introducing, stimulating anticipation, and advertising the character of the museum through previews for return visitors as well as the uncommitted passersby.

Civic Role -- Not Another Roadside Attraction" The first museums were private castles and palaces; they housed treasures. As museums have become more public, they have become valuable anchors in neighborhoods, communities, and regions. Their democratization has evolved into a rich assortment of images and programs in response to their context. Serving the public has proven valuable for the museum as well. It brings people to the door and presents an intangible positive image.

The Portland Art Museum responds to its physical context and completes an urban space. The Oakland Museum makes urban space; the Stuttgart Museum enriches a pedestrian path.

In a reversal, the location of the museum can make accessible parts of the urban milieu and the natural environment that would otherwise be remote. Parr (1969) stresses the value of the environment for stimulating the mental development and enriching the well-being of children and adults. As a part of image, the setting becomes a theme for the museum.

PREVIEW discusses the double function of events and objects for the museum preview that also enriches the urban milieu.

OUTDOOR EXTENSION explores the many approaches that apply to civic role and the opportunity to use the larger context as a part of display.

Making a Difference: At the larger scale, no matter how specialized and private a museum may be, all have a certain level of public and civic responsibility. As our society becomes more complex and pluralistic, the museum setting offers an opportunity to learn from and celebrate the differences (Bloom, ).
The Children's Museums and science and technology centers are at the opposite end of the continuum from the traditional treasure house. Trying on another culture through role playing and playing with people from other neighborhoods is an added dimension of the civic role that has been integrated into the children's museum program.

The Capitol Children's museum in Washington, D.C. has an international hall providing an extensive Mexican setting. The Kohl's Education Center in Wilmette, Illinois, uses the setting of Jerusalem for role play with a rich cultural mix.

The new museums can provide a more formal setting for interaction. They can provide a locus for activities -- community and neighborhood meetings along with the performing arts. They can be a catalyst for neighborhood development, new friendships, and a sense of fellowship (Parr, 1978). The Atlanta High museum is a recent example for a place which doubles as a symbol of community pride and as an event of community.

THE RIGHT LOCATION expands on the opportunities for community enrichment through the choice of the site.

LANDMARK discusses the phenomenon of neighborhood and community pride.
PATH

Paths do more than direct the flow of visitors through a museum. "A" path and "the" path can be an exhibit. The manifesto of children's museums demands that the path be delightful and mysterious with unexpected views near and far, high and low. In the new museum they are an integral part of the total experience. The rationale is that a relevant and delightful experience solves the problems of museum fatigue and communication.

The main issues of path and circulation are people-related -- headcount, wayfinding, orientation, information overload and object satiation (Borhegyi and Hanson, 1964; Downs and Stea, 1977; Elliott and Loomis, 1975) and the design-related -- never enough square footage (Curtis, 1983) and never enough money (Danilou, 1976). Decisions about the central path set the mood and determine the major museum experience. Its overall design can solve most wayfinding and orientation problems. Its articulation provides rich experiences without a major investment in ornament. The amount of space designated for circulation competes with the always too little room for exhibits, staff, and storage, on one hand, but can double functions with activity space and contribute to it, on the other hand.

"Museums, forget it! My feet always hurt and my back aches." Too much of a good thing.

Discovery and exploration changes to physical fatigue and information overload if one has to depend upon signs, consult maps, travel through areas that are not of interest. On the other hand, simplistic, monotonous paths may seem deadly in a shorter period of time.

**Headcount:** Museum fatigue is detrimental to the image of museums (Brawne, 1982). Increasingly, museums depend upon public support and return visits for their revenue and for their survival. Visitors that get lost, overextend their stay, lose track of distance and time, or become frustrated and insecure because they can't find their way easily are less likely to return.
Traditionally, the issues clustering around the subject of the path have dealt with the problems of wayfinding, orientation and places to rest along the way.

RETREAT AND OUTDOOR EXTENSION discuss the value of pacing and variety.

PREVIEWING and UNDERSTANDABLE STRUCTURE deal with the issue of coherence and orientation from the outside to the inside.

CLEAR CIRCULATION WHICH OVERLOOKS concentrates on those physical solutions that provide navigable and predictable paths.

POOLS OF LIGHT and FOCAL POINT deal with the problems of orientation differently. They incorporate pacing, variety and change to counter monotony.

Navigating in the Three Dimensions: The study of circulation and routes has dominated visitor behavior in museum research. Literature on turning right and visitor paths in galleries abound (Screven, 1979).

Although paths are usually explained in plan, the experience of moving through space and finding one's way are multi-dimensional and multi-sensory. Time, cadence, the sensation of going up or down, and the opportunities for different points of view must be included.

Vertical circulation poses special conditions. Elevators, stairs, and ramps can enhance or detract from the experience of the path. They are transitional elements. They can capture a large percentage of the budget and the floor area.

Budget: Expanding the path into the out-of-doors conceptually and physically, and circulation which serves multiple functions increase the total square footage while enriching the experience.

Variety and Change: New and far views, unexpected views through, views from high and low, from one level to another, even mirrored ones provide built-in richness. They expand the impact of exhibits and give more than simple wayfinding.

Of course, paths can work in conjunction with exhibit spaces, are incorporated into them, and are spaces themselves. LARGE SPACES AND SMALL includes a discussion on the qualities of spaces that applies to the experiences of path.
The sequence in which exhibits are viewed or encountered will tend to imply a hierarchy whether intended or not; at least, they present an opportunity for continuity. (Brawne, 1982). The degree of conceptual structure depends upon the individual program -- the type and size of the museum, the permanence of the exhibits, and the sheer number of visitors. The carefully orchestrated route need not be permanent or obvious. It can present many alternative routes while maintaining a dominant path that aids in general orientation and an opportunity to bypass. There is no one ideal. There is also the conflicting need for complexity: Although a clear, dominant path is useful for basic orientation, alternative pathways should be available. They can provide mystery and discovery that may not happen otherwise; they can provide some privacy for concentrated focus, and experimentation perhaps beyond the individual's skill level that would not be attempted in a large open space (Cameron, 1968).

CLEAR CIRCULATION WHICH OVERLOOKS describes some of the approaches which can be adopted to deal with wayfinding issues.

Pilgrimage and Journey: Setting the mood for the museum begins before the front door. Getting there can start down the street, at the corner, in the parking lot, at the edge of town, at home. In addition to the physical presence, the conceptual path is part of the museum image.

Saying Goodby: Leaving the museum is taken for granted. Museum fatigue has been traditionally confined to the experience of the internal path and displays. How do people leave? What do they need and what do they see as they exit? On arrival, full of anticipation, the focus is the museum. On departure, finding the car, getting a taxi, the bus stop, subway, the weather are a part of the exit experience.

Saying goodbye is an opportunity for summation, conclusion, and grand finales -- an unexpected view back into the museum, an overview, a breathtaking view on leaving.

Using the larger context for the arrival and departure transition expands the square footage of the museum. The East Wing of the a National Gallery of Art captured the area in front of the entry including the street with a focal point and a heavily gestured surface. It is a gathering and waiting place where cars and pedestrians mix comfortably. It provides a grand sense of arrival and place.
COMING AND GOING addresses entering, exiting, and the activities associated with them.

Civic Role: Museum paths can be an extension of the city and neighborhood. Responding to issues or image and return visits, civic paths serve multiple functions. From a simple arcade to a sculpture garden they can provide special experiences along the way actively or passively. They can be shelter, provide previews of what is inside, access to exhibits even when they are not open, and public service. A civic path leads the uncommitted visitor to the door.

THE RIGHT LOCATION and PREVIEW point out the inherent in civic role.
DISPLAY AND ACTIVITIES

Central to the museum experience is the interaction of people and exhibits. Path supports the activities and display. It provides access to and context for the "real things" that make museums unique. In the long run, the visitor's lasting impression of a museum is based upon the meaningfulness of its exhibits.

The context from which the spirit and theme of a museum arises is based upon the philosophy and attitude of the museum, the nature of the collection, and the characteristics, the motivations and the sheer number of the people who visit.

Museums do more than collect and inform. It is a setting that can support and encourage exploration and discovery for the individual, a living lab for children and adults, a place of gathering and community. Activities and display are more than tools for educating and informing. They are the elements of the total environment that make a particular museum experience unique.

"I.Q. and scholastic achievement probably have considerably less to do with the ability to create and enjoy happiness, than the milieu has to do with I.Q. and Scholarship." (Parr, 1969b)

Just Another Sunset:" Museum professionals are concerned about the potential trivialization of exhibit content in the campaign to win public support. Hands-on experiences, the interactive computer, or a video film on the life of the artist is not always appropriate. The new museum need not be touchy-feely; the amount of interactive displays and the degree of formality depends upon the nature of the collections and the goals of a museum. Serious education has never been the sole goal of most.

Humane and relevant experiences can be aesthetic, uplifting, and inspiring; the elegant is just as necessary to the human spirit of the young and old as the playful. Providing experiences that improve the passing moment, providing settings and opportunities for contemplation, retreat, an alternative point of view, or a few new thoughts are services whose value can not be easily measured. They may do no more than improve the passing moment -- another beautiful sunset. (Parr, 1969a)
Meaningful Information: The "participatory," "active," and "hands-on," activities can be valuable or meaningless. Pushing a button to activate a light is not developmental nor very satisfying. It can be more dynamic than just staring at a display or it can be distracting.

The real contribution to development and learning is the interactive display that activates many variables so that one is challenged to think, try, analyze, make choices, synthesize, and play roles. With these come learning and internalization; besides, it's fun.

ACTIVITY CORE discusses depth, participation and involvement in the design of micro-environments and larger places within the museum. It contains two in-depth examples.

Information Overload and Remembering: Whether the exhibits are indepth activity cores or a series of objects, museum fatigue interferes with enjoyment, learning, and understanding. The most relevant exhibit is meaningless if the participants are overloaded from too much of a good thing -- too much activity, too many exhibits, too many objects. Taking a break rests the mind and the body. The integration of quiet retreats, places to overlook human activity, to talk with friends, and views of the near and far landscape enhance understanding and aid remembering by pacing the amount of information.

RETREAT discusses the many aspects of museum fatigue -- mental and physical, the role of retreat in pacing and providing a change in mood and activity.

Activities and displays need to be punctuated and framed. Variety and change and breaks between exhibit clusters aid in comprehension, provide opportunities for the mind to process information, and aid in recall.

LARGE SPACES & SMALL discusses a variety of spatial sizes, inherent opportunities for display, and their role in pacing the museum experience.

FOCAL POINTS explores their use in conjunction with display to aid in summation and recall and to prevent object satiation.

OUTDOOR EXTENSIONS includes their role in pacing and pauses in the overall museum experience and in providing special opportunities for display.

POOLS OF LIGHT deals with visual fatigue and establishing hierarchy within and between displays.

DISTRIBUTION OF SERVICES discusses the relationship of exhibits to support services.
Building and Display: Given a finite amount of money and therefore limited square footage, the kind of building that is chosen will affect the nature and number of exhibits, and the task of exhibit design.

To complicate matters, museums change over time; they experience unexpected growth and quite often change their direction. Although the strategies of multiple functioning spaces and built-in flexibility are a response to possible changes in the future, they are a major determinant of the complexity of the exhibit design -- negatively and positively from the present onward.

The choice of building type -- undifferentiated shed, adaptive reuse, or a new building -- offers a variety of opportunities and constraints that directly affect exhibit planning and design. An anonymous covered space is indeed flexible, yet it requires more planning and materials for orientation, variety and change, contrasts, noise and light control, and differentiated space.

What often appears to be a compromise -- the adaptive reuse building -- has proven to have many advantages: it is a context to respond to -- exploiting its qualities and using its limitations to advantage: the rhythm of the structural grid in the Boston Children's Museum has a unifying affect; the dimension between members in the old warehouse is wide enough to work with the requirements of the exhibits.

UNDERSTANDABLE STRUCTURE includes examples of design and organizational strategies that exemplify the many possible arrangements.

Allocating Resources: Beyond the issue of budget, the new building for children's museum seems somehow incongruous. Perhaps the emerging image of what a children's museum should be is so solidly rooted in its humble beginnings, and the philosophical basis for them is so tied to recycling and environmental sensitivity that the fit into a new building is less appropriate. It is difficult to "design in" the spontaneous, delightful spirit that is present in the left-over buildings.

THE RIGHT LOCATION discusses the related issue of the advantages and disadvantages that usually come with the building type.

Larger Context and Display: The exploitation of the surrounding context can stretch the exhibit space by increasing the actual square footage available and expanding the display through perceptual augmentation -- distant views, sounds, smells.
ACTIVITY CORE AND OUTDOOR EXTENSION include discussions on the potential of the larger context in design.

Integration: Although the primary focus of museums is on exhibits, the overall goal of the new museum is to provide a positive museum experience.

While the other instruments are support, an object in an exhibit and an activity area can be powerful focal points, motivators for movement through the museum. The "City Slice" of the Boston Children's Museum is an activity core that serves this multiple function.

Circulation and Display: A major issue in the design of museums is the area required for circulation. Integrating the path with activity cores and displays, and arranging exhibits with far previews and postviews from the path doubles the functional use of the area required for circulation while enriching the experience of path.

The rich and varied nature of activity cores provides opportunities for enriching vertical circulation. A major stairway, escalator, ramp, or see-through elevator adjacent to a many-level, interactive city slice can provide a changing point of view on a very complex scene while moving through space. The same exhibit seen from afar gives a different perspective.

VISIBLE BACKSTAGE presents another opportunity for double-functioning space.

Numbers at the Door/Traffic: The general organization of the museum and its ambience will be greatly influenced by the sheer number of visitors, their ages and whether they come in groups, families, or alone. A heavy constant flow of traffic requires a more dominant path and limits the amount of integrative, in-depth activities.

Although the "blockbuster shows" have brought notoriety to museums, their real value for raising revenue and consistent attendance is debatable (Noble, 1984). The main criticism of the push to be popular is that it will negatively affect that very quality of the museum experience that they are trying to portray.

LARGE SPACES AND SMALL discusses the relationship of large flexible display space to the museum experience.

Providing in-house programs for school systems requires major organizational strategies. Their demands on space and impact on the museum ambience should be thought of in terms of several busloads at a time. Although Cameron (1968) argues against large group trips to museums for learning, as
introduction programs the numbers can have a profound influence. Special entries and gathering areas, the wear and tear on exhibit areas, the size and accessibility of exhibit areas are all affected.

COMING AND GOING deals with the basic planning for large groups of school children.

Civic Role: The broad issues of the civic role of the museum are covered under "Image." Exhibits and displays reinforce those connections to the neighborhood, community and larger environment through their themes and spirit.

ACTIVITY CORES presents a compelling argument for the value of role playing and in-depth cultural exhibits for cross-cultural understanding.